

**Sampling Quality Assurance Plan
For
City of Driggs Wastewater Treatment Facility, Idaho**

Teton County, Idaho

**Submitted by:
City of Driggs Wastewater Treatment Plant Department
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PART ONE: INTRODUCTION & STUDY OBJECTIVES

The City of Driggs, in cooperation with The City of Victor, Idaho has developed this Sampling Quality Assurance Plan (SQAP). The purpose of this plan is to organize efforts to identify and locate the existing contaminants in the wastewater system.

1.1 Project Organizational Structure

City of Driggs will develop the SQAP document in coordination with the City of Victor Public Works Department. Each City's departments will be responsible for sample collection, analysis and reporting to City of Driggs wastewater treatment plant operator. The City of Driggs wastewater treatment plant operator will be responsible for providing technical support and necessary guidance documents required for completing the SQAP project successfully.

Table 1: Contact Information

EPA	IDEQ	City of Driggs	City of Victor
US EPA Region 10 Attn: David Domingo 1200 Sixth Avenue Suite 900 M/S OCE-133 Seattle, Washington 98101-3140	Idaho Department of Environmental Quality Attn: William Teuscher, (Willie) 900 N. Skyline, Suite B Idaho Falls, ID 83402	City of Driggs Attn: Dylan McCracken PO BOX 48 Driggs, ID 83422	City of Victor Attn: Robert Heuseveldt 32 Elm Street P.O. Box 122 Victor, ID 83455
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1.2 Background Information

The wastewater treatment facility is jointly owned by the City of Victor and the City of Driggs. The City of Driggs provides the operators for the facility. The wastewater treatment plant received a new NPDES permit in 2011. To meet the new requirements the city had to construct a new treatment plant. The plant has been performing well with the exception of Ammonia removal. Plant operators have been working vigorously along with engineers to find what is inhibiting the nitrification process. Both Cities have adopted Pretreatment and FOG ordinances to regulate and prevent the contaminants from coming to the plant.

1.3 Project Objective

The primary objective of this SQAP is to provide the Cities with direction to monitor collection system line segments for contaminants and to submit the results to EPA. A secondary objective is to ensure that water quality data is collected in a timely manner for listing purposes, and that periodic data analyses for determining the trends in water quality of wastewater within Victor and Driggs collection systems. The final result of this plan will be a monitoring report prepared by the City of Driggs, in coordination with the City of Victor, and submitted to EPA.

PART TWO: SAMPLING PLAN

2.1 Study Area

The areas of study for this plan are from all points of connection to the City of Victor collection system to all points of connection to the City of Driggs collection system. The cities will start the initial sampling at their main collection sites and work upstream to locate the sources of contamination. A list of sampling locations with GPS coordinates will be kept.

2.2 Sampling Parameters and Schedule

The contaminants that will be focused on as part of this plan will be COD, PH and Ammonia. Samples will consist of four 24 hour composite samples collected over a 30 day period not less than one week apart.

Four samples will be collected during each of the following sampling periods:

- First Sampling Event (FC) – February 2017
- Second Sampling Event (FC) – March, 2017
- Third Sampling Event (FC) – April, 2017
- Fourth Sampling Event (FC) – May 2017

2.3 Personnel and Resources

Staff from the Cities of Driggs Victor Public Works Department will be responsible for sample collection in their respective collection areas. Subsequent analysis will be conducted by Teton Microbiology Laboratories personnel. The Cities are staffed with qualified individuals that are able to perform the sampling. They can also routinely conduct NPDES and stream monitoring for regulatory requirements.

PART THREE: QUALITY ASSURANCE PLAN

3.1 Regulatory Compliance

The methodology employed in the collection of water quality samples and the data reported in the final Monitoring Report in fulfillment of this plan shall adhere to the requirements of the NPDES permit. The laboratory analyses conducted in fulfillment of this plan shall comply with Title 40 of the Code of Federal Regulations, Part 136.

3.2 Field Quality Assurance

EPA has developed standard operating procedures (SOP) establishing uniform methods for the field collection of data, document control, quality assurance, laboratory safety, as well as other activities. These guidance documents were developed to document and ensure the validity of measurements, analyses, and the representation of samples collected.

3.2 a. Sample Collection Technique (By Parameter) and Sample Representativeness:

Field samples will be collected in accordance with EPA's SOP. The sample collection technique utilized will be determined by field personnel on site. Safety is of the utmost concern when choosing a sample collection technique and will often be the determining factor.

Procedure

- Upon arrival at the sampling location, staff members should first wear their high-visibility safety vests and place safety cones out before proceeding with work.
- Proceed to manhole or lift station, open lid safest way possible.
- Then, Place composite sampler in a secure location, place the collection line water's mid-channel point being careful to have end of hose submersed in the flow. Review the program and turn on the sampler. Since turbulence and water velocity principally govern mixing, the selection of a site will ensure good mixing.
- Once the sample has been collected, the staff member attaches a label with the time, date, and staff member making the collection marked on the label. The label is sealed with clear tape, and the sample is placed in a cooler of ice for transportation to the laboratory.
- Prior to transportation, Laboratory Source Documents (chain of custody) containing all information recorded on the sample bottles, are completed, placed inside a plastic bag, and taped to the underside of the cooler lid.
- Samples are transported to the laboratory.

3.2 b. Sample Containers, Preservatives, Refrigeration and Holding Time Limitations:

Holding times, sample containers, and preservatives for collected samples will comply with 40 CFR 136. Tests will be refrigerated upon arrival at the laboratory and will be prepared and analyzed as soon as staff schedules allow (holding time not to exceed 8 hours). All sample containers are pre-sterilized by the City of Driggs and City of Victor staff prior to field collection. Sample collection devices, should be pre-rinsed between sample collections using water.

3.2 c. Sampling Personnel Training:

Sampling personnel agree to follow the standard collection methodology as outlined in this SQAP document under 3.2a. . Any field training which may be deemed necessary will be arranged through, and provided by City of Driggs and/or City of Victor Public Works Department.

3.3 Laboratory

All laboratory analyses performed in fulfillment of the requirements of this project will be performed by laboratory analysts utilizing EPA approved methods. All laboratories utilized in fulfilling the requirements of this project will conform to the QA/QC measures required by the specific methods in 40 CFR Part 136. Adequate records concerning all laboratory analyses performed and their respective QA/QC measures will be retained by the laboratory performing the analyses for a minimum of three years and will be available for review. All samples analyzed in fulfillment of this project will conform to the standard protocols as outlined in US EPA's Standard Methods (latest edition), and 40 CFR Part 136.